

IN THE CLAIMS

1. (Currently Amended) A continuous time sigma delta converter comprising:
conversion means having known non-ideal characteristics and arranged to provide an output signal;
a compensation circuit comprising error modelling components arranged to substantially model the non-ideal characteristics of the conversion means in order to provide a compensation signal, the non-ideal characteristics including asymmetrical errors associated with non-ideal rising and falling edges of signal transitions of the converter; and
summation means coupled to combine the compensation signal with the output signal in order to provide a compensated output signal.
2. (Previously Presented) The converter of claim 1 further characterised by:
the summation means being arranged to subtract the compensation signal from the output signal in order to provide the compensated output signal.
3. (Cancelled)
4. (Currently Amended) A method of compensating for known non-ideal characteristics in a continuous time sigma delta converter, the method comprising:
converting an input signal of one time domain to an output signal of another time domain using a converter having known non-ideal characteristics;
modelling the non-ideal characteristics of the converter in a compensation circuit, the non-ideal characteristics including asymmetrical errors associated with non-ideal rising and falling edges of signal transitions of the converter; and
combining a compensation signal output of the compensation circuit with the output signal of the converter in order to provide a compensated output signal.
5. (Previously Presented) The converter of claim 1 further characterised by:
the non-ideal characteristics being associated with a feedback path of the converter.

6. (Previously Presented) The converter of claim 1 further characterised by:
the non-ideal characteristics including symmetrical errors associated with non-ideal rising and falling edges of signal transitions of the converter.
7. (Cancelled)
8. (Previously Presented) The converter of claim 1 further characterised by:
the compensation circuit having calibration parameters determined by a dichotomy technique which iteratively refines the values of the calibration parameters.
9. -14. (Cancelled)
15. (Previously Presented) The method of claim 4 further characterised by:
the non-ideal characteristics being associated with a feedback path of the converter.
16. (Previously Presented) The method of claim 4 further characterised by:
the non-ideal characteristics including symmetrical errors associated with non-ideal rising and falling edges of signal transitions of the converter.
17. (Cancelled)
18. (Previously Presented) The method of claim 4 further characterised by:
the compensation circuit having calibration parameters determined by a dichotomy technique which iteratively refines the values of the calibration parameters.